

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,035	05/12/2005	Masayuki Miwa	JCLA12543	3564
23900 J C PATENTS	7590 08/24/2007 INC		EXAMINER	
4 VENTURE, SUITE 250 IRVINE, CA 92618			PHASGE, ARUN S	
IRVINE, CA 9	2018		ART UNIT PAPER NUMBER	
			1753	
			MAIL DATE	DELIVERY MODE
			08/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
065 - 4 - 4 - 0	10/535,035	MIWA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Arun S. Phasge	1753	
The MAILING DATE of this communication a	ppears on the cover sheet wi	th the correspondence address	
Period for Reply	N V 10 057 70 5V5157 - 14		
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the mai earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION 1.136(a). In no event, however, may a round will apply and will expire SIX (6) MON ute, cause the application to become AE	CATION. eply be timely filed THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133)	
Status		•	
1) Responsive to communication(s) filed on 12	lune 2007		
	nis action is non-final.		
3) Since this application is in condition for allow		ers prosecution as to the merits is	
closed in accordance with the practice under	•	• •	
Disposition of Claims		,	
4) Claim(s) <u>1-7</u> is/are pending in the application	1		
4a) Of the above claim(s) is/are withdr			
5) Claim(s) is/are allowed.	awn nom consideration.		
6)⊠ Claim(s) <u>1-7</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	/or election requirement.		
Application Papers			
··· _			
9) The specification is objected to by the Examil 10) The drawing(s) filed on is/are: a) a		ov the Everine	
Applicant may not request that any objection to the	• • •	•	
Replacement drawing sheet(s) including the corre			١
11) The oath or declaration is objected to by the		• •	<i>)</i> .
Priority under 35 U.S.C. § 119		0.1007.01011.011011111.100-102.	
<u> </u>		440(-) (-) (0)	
12) Acknowledgment is made of a claim for foreignal All b) Some * c) None of:	in priority under 35 0.5.C. §	119(a)-(d) or (f).	
1.☐ Certified copies of the priority docume	inte have been received		
2. ☐ Certified copies of the priority docume		nalication No	
3. Copies of the certified copies of the pr			
application from the International Bure		received in this National Stage	
* See the attached detailed Office action for a lie		received.	
	·		
Attachment(s)			
1) D Notice of References Cited (PTO-892)	4) Interview S	ummary (PTO-413)	
2))/Mail Date formal Patent Application	
Paper No(s)/Mail Date	6) Other:		

Art Unit: 1753

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liang of record for reasons of record.

Response to Arguments

Applicant's arguments filed 6/12/07 have been fully considered but they are not persuasive.

Applicants argue that the present claims are directed to a one-stage electrodeionization device, whereas the Liang patent is used in a two-stage electrodeionization device.

The fact that the Liang patent is directed to a two-stage device is not patentably relevant, since only on stage of the device can be used to reject the claimed invention

Applicants further argue that the Liang patent would not provide the inspiration of using alternatively positioned concentrating compartments and desalting compartments filled with mixed ion exchangers of different ratio.

The Liang patent discloses the use of a variety of alternatively positioned mixed chambers (see column 10, lines 36-58). The reference further discloses the use of a bed having greater anion exchange resins provides the benefit of elevated pH (see column 9, lines 30-60, in particular lines 50-53).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of the Liang patent with the teachings contained therein, because the Liang patent teaches the use of the control of pH to obtain the separation of a variety of contaminants by the selection of appropriate ion exchange resin mixtures and ratios.

Therefore, the claims stand rejected.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the

Art Unit: 1753

advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/535,035

Art Unit: 1753

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arun S. Phasge Primary Examiner Art Unit 1753